# Grid Resiliency Grant Program Summary

# Nebraska's Grid Resiliency Grant Program, funded by the Infrastructure Investment and Jobs Act, to award grants to eligible entities to prevent outages and enhance resiliency of the electric grid.

NDEE plans to support grid improvement projects that result in a more resilient electrical grid and promote a clean and equitable energy economy. Eligible projects will rebuild and restore energy infrastructure for transmission and distribution, protect existing equipment from weather-related events, support new adaptive protection technology, and provide recruitment and retention of energy technology workers.

•	Project must be	Cost Matching Requirements	Eli	gible Applicants:
	completed in 5 years	<ul> <li>Large Utilities (more than 4 million MWh per year in sales) = 115%</li> </ul>	⇒	Electric Grid Operators
•	Current Funds Available:	<ul> <li>Small Utilities (4 million or less MWh per year in sales)</li> <li>= 48.33%</li> </ul>	⇒	Electricity Storage Operators
	\$10.86 million	Ineligible Activities	$\Rightarrow$	Electricity Generators
•	Maximum Award Amount: \$2.0 million	<ol> <li>Construction of a new -         <ul> <li>a) electric generating facility; or</li> <li>b) large-scale battery-storage facility that is</li> </ul> </li> </ol>	⇒	Transmission Owners and Operators
•	55% of Funding will be set aside for small utilities	not used for enhancing system adaptive capacity during disruptive events; or 2. Cybersecurity.	⇒	Distribution Providers
			$\Rightarrow$	Fuel Suppliers

Funding must be distributed equitably to Nebraskans, including underserved communities that are more susceptible or vulnerable to electric power outages. Priority will be given to projects that demonstrate the greatest community benefit. Special consideration will be given to projects in areas of greater energy burden and historically underserved communities.

### Pre-proposals — Due January 31, 2024

Eligible entities are strongly encouraged to submit pre-proposals which provide NDEE with a general outline of each project using a two-page preliminary proposal checklist to be submitted to <u>NDEE.GRIDRESILIENCY@NEBRASKA.GOV</u>.

NDEE will assess pre-proposals for eligibility and alignment with program objectives. Prospective grantees may submit multiple pre-proposals at this time, one for each project. However, during the application period grantees will be limited to one comprehensive application submission that focuses on funding for a single project.

More info: NDEE.gridresiliency@nebraska.gov http://dee.ne.gov/NDEQProg.nsf/OnWeb/POEREG



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## Eligible Project Categories (Objectives)

1. <u>Rebuild and Restore</u> – provides funding for projects to restore, strengthen, and/or replace existing equipment and substations. This includes upgrading or replacing existing power poles; rebuilding or upgrading transmission and distribution lines; undergrounding of electrical equipment and powerlines; and upgrades to substations with new equipment that may reduce the risk of electrical outages while meeting the current and future needs of changing communities.

Acceptable Metric - Rebuild and Restore					
Number of poles upgraded	Average restoration time				
Number of transformers hardened	Reduced number of power quality incidences				
Number of substations hardened	Miles of power lines reconductored or undergrounded				
Reduction of transmission and distribution losses	Reduced number of equipment failures				
Reliability indices (e.g., System Average Interruption Duration Index-SAIDI, System Average Interruption Frequency Index-SAIFI, Customer Average Interruption Frequency Index-CAIFI)					

2. <u>Protect from Weather Related Events</u>- provides funding for projects that would harden the electric system components to help withstand extreme heat, cold, and severe storms, along with vegetation management. This includes weatherizing electric generation equipment and utilization of freeze protection methods and technologies.

Acceptable Metrics - Protection from Weather Related Events				
Number of generators protected	Miles of vegetation management			
Number of substations hardened	Reduced number of equipment failures			
Number of electrical system components hardened	Number of outages exceeding a utility's threshold for recov- ery time or incidence			

3. <u>Adaptive Protection Technology</u>- provides funding for projects acquiring adaptive protection technology. These types of projects would utilize real-time monitoring of electrical parameters and the condition of critical components that would enable the system to adjust to an optimal state. This could be critical to respond to rapidly changing system conditions due to generation and transmission outages and weather changes.

Acceptable Metrics - Adaptive Protection Technology				
Number of power quality monitors	Load Factor			
Number of smart meters installed	Number of fault current limiters installed			
Number of fault detectors installed	Reduced number of power quality incidences			
Number of advanced switches installed	Reliability indices (e.g., SAIDI, SAIFI, CAIFI)			
Number of transformer on-line gas monitors	Number of Phasor Measurement Units (PMUs) installed			
Number of automated distribution feeder upgraded				

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## Eligible Project Categories (Objectives), cont.

4. <u>Recruitment and Retention of Workforce</u>- provides funding for projects that support the creation of apprenticeships, good-paying jobs, and continued training opportunities to acquire and maintain qualified electric energy technology workers.

Acceptable Metrics - Recruitment and Retention of Workers				
Number of energy sector jobs created	Number of training programs supported			
Increase in number of credentials for workforce	Number of apprenticeships created			

5. <u>Economic and Environmental Benefit to Disadvantaged Communities</u>- ensure that benefits from projects funded are distributed equitably to Nebraskans, including underserved communities that are more susceptible or vulnerable to electric power outages.

_	Acceptable Metrics - Economic and Environmental Benefit to DACs				
)	Estimated average decrease in annual electric energy costs in underserved households.	Energy saved [MMBTU or MWh] or reduction in fuel by underserved households			
	Avoided air pollutants (CO2 equivalents, NOx, SO2, and/or PM2.5) in underserved communities	Estimated population in underserved communities benefited			

#### **Timeline (Subject to Change)**

Pre-proposals Due to NDEE	January 31, 2024
NDEE Comments on Pre-proposals	February 16, 2024
Application Period Opens	March/April 2024
Selected proposals sent to DOE	June/July 2024
Awards Announced (Anticipated)	Fall 2024

More info: NDEE.gridresiliency@nebraska.gov http://dee.ne.gov/NDEQProg.nsf/OnWeb/POEREG



#### **Full Proposals**

A form for creating full proposals will be distributed and available on the NDEE website, and notice will be sent when it is available.

http://dee.ne.gov/NDEQProg.nsf/OnWeb/POEREG

Additional Information

https://netl.doe.gov/bilhub/grid-resilience/formula-grants

https://www.energy.gov/gdo/preventing-outages-and-enhancing-resilience-electric-grid-grants

Questions can be directed to ndee.gridresiliency@nebraska.gov



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